UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/720,893	11/24/2003	Sivaprasad Padisetty	MSFT125957	5309	
	7590 04/24/200 FFIELD (Microsoft Con	EXAMINER			
C/O WOLF, GF	REENFIELD & SACK	WAI, ERIC CHARLES			
600 ATLANTIC AVENUE BOSTON, MA 02210-2206			ART UNIT	PAPER NUMBER	
			2195		
			MAIL DATE	DELIVERY MODE	
			04/24/2009	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Communication		Applicati	on No.	Applicant(s)				
		10/720,89	93	PADISETTY ET AL.				
	Office Action Summary	Examine	•	Art Unit				
		ERIC C. V		2195				
Period fo	The MAILING DATE of this communication or Reply	n appears on the	e cover sheet with the c	correspondence a	ddress			
WHIC - Exter after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR RICHEVER IS LONGER, FROM THE MAILIN asions of time may be available under the provisions of 37 CF SIX (6) MONTHS from the mailing date of this communication period for reply is specified above, the maximum statutory pre to reply within the set or extended period for reply will, by seeply received by the Office later than three months after the part of the provided patent term adjustment. See 37 CFR 1.704(b).	G DATE OF THE FR 1.136(a). In no even. In. eriod will apply and wetatute, cause the app	HIS COMMUNICATION ent, however, may a reply be tin ill expire SIX (6) MONTHS from lication to become ABANDONE	N. nely filed the mailing date of this of D (35 U.S.C. § 133).				
Status								
1)	Responsive to communication(s) filed on _	14 January 200	a					
•		-						
3)	This action is FINAL . 2b) This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
٥,١	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims							
4)⊠	Claim(s) <u>1-21</u> is/are pending in the applica	ation.						
,	4a) Of the above claim(s) is/are withdrawn from consideration.							
	5) Claim(s) is/are allowed.							
	6)⊠ Claim(s) <u>1-21</u> is/are rejected.							
· ·	Claim(s) is/are objected to.							
-	Claim(s) are subject to restriction a	nd/or election r	equirement.					
Applicati	on Papers							
9)☐ The specification is objected to by the Examiner.								
•	The drawing(s) filed on is/are: a)		objected to by the I	Examiner.				
,	Applicant may not request that any objection to	-						
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority ι	ınder 35 U.S.C. § 119							
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 								
2) Notice (3) Inform	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948 mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	3)	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal F 6) Other:	ate				

Art Unit: 2195

DETAILED ACTION

1. Claims 1-21 are presented for examination.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1, 3, 8, 10, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. ("TASK Forces: Distributed software for Solving Problems of Substantial Size", Proceedings of 4th Software Engineering, September 1979, pgs 315-330).
- 4. Regarding claim 1, Jones teaches the computer-readable medium having computer-executable instructions for performing steps for coordinated execution of distributed tasks, comprising:

receiving, by a first computer in a group of peer computers, each of the peer computers having at least one processing unit and one input device and one output device distinct from the at least one processing unit (pg 315, "1. Introduction" paragraph 1, wherein multiple processor computers can by distributed computers connected with

Art Unit: 2195

high speed communication lines), a set of execution instructions for the peer computers, the execution instructions including tasks to be performed and an automatically, without user action, determined assignment of the tasks to the peer computers (pg 315, "1. Introduction" paragraph 2, and pg 316 col 2 paragraph 4; wherein task forces is a collection of cooperating, communicating processes, which use system synchronization and communication mechanisms to solve a single problem, and assignment of processes takes place)

forwarding, to the other peer computers in the group, execution instruction information derived from the execution instructions such that each peer computer in the group is informed of tasks assigned thereto in relation to tasks assigned to the other peer computers (pg 326, col 1, "The Coordinator", paragraph 1; wherein the manager coordinates server actions);

executing, tasks assigned thereto in connection with execution of tasks assigned to the other peer computers in the group (pg 326, col 1; col 2, paragraph 2, "The Coordinator", paragraph 1; wherein the coordinator process also handles the I/O associated with the image processing tasks), and

receiving, by the first computer from each of the other peer computers, and transmitting, by the first computer to each of to other peer computers, peep-to-peer communication messages containing task execution status to synchronize and coordinate the execution of the sequence of tasks (pg 315, "1. Introduction" paragraph 2, wherein it is inherent that communication messages are used to coordinate execution).

Art Unit: 2195

5. Jones does not explicitly teach that a sequence of tasks is received. Jones does teach that it routine for the execution of one process to be depending upon the progress of another process (pg 317, col 1 last paragraph). It would have been obvious to one of ordinary skill in the art to modify Jones to teach a sequence of tasks since it is well known in the art that program execution is typically serial in nature.

- 6. Regarding claim 3, Jones teaches that the execution instructions include a job that executes a predefined set of tasks (abstract, wherein it is inherent that the processors execute a set of tasks that are predefined).
- 7. Regarding claim 8, 10, 15, and 17, they are the method and computer system claims of claims 1 and 3. Therefore, they are rejected for the same reasons as claims 1 and 3.
- 8. Claims 2, 7, 9, 14, 16, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al ("TASK Forces: Distributed software for Solving Problems of Substantial Size", Proceedings of 4th Software Engineering, September 1979, pgs 315-330) in view of Applicant's Admitted Prior Art (AAPA).

Art Unit: 2195

9. Regarding claim 2, Jones does not teach that the sequence of tasks to be performed constitutes a test run of interactive computer operations.

- 10. AAPA teaches the use of testing to ensure the proper functioning of computer hardware and software ([0002]).
- 11. It would have been obvious to one of ordinary skill in the art at the time of the invention to include that the sequence of tasks to be performed constitutes a test run of interactive computer operations. One would be motivated by the desire to ensure that the computers function properly.
- 12. Regarding claim 7, Jones does not teach performing the step of reporting results of execution of tasks to a database.
- 13. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the reporting of results to a database. One would be motivated by the desire to save the results of a testing process as indicated by AAPA ([0002]).
- 14. Regarding claim 9, 14, 16, and 21, they are the method and computer system claims of claims 2 and 7. Therefore, they are rejected for the same reasons as claims 2 and 7.

Application/Control Number: 10/720,893

Art Unit: 2195

15. Claims 4-6, 11-13, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable Jones et al ("TASK Forces: Distributed software for Solving Problems of Substantial Size", Proceedings of 4th Software Engineering, September 1979, pgs 315-330) in view of Saulpaugh et al. (US Pat No. 6,934,755 hereinafter Saulpaugh).

Page 6

- 16. Regarding claim 4, Jones does not teach that the execution instructions are provided to the first computer in an input XML document.
- 17. Saulpaugh teaches the use of the XML standard to represent objects and code (col 16 lines 1-7). Saulpaugh also teaches that XML object representations are language independent so that Java and non-Java applications can send and receive object from each other (col 16 lines 15-20).
- 18. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to include that the execution instructions are provided to the first computer in an input XML document. One would be motivated by the desire to use a communication standard to perform the passing of platform independent messages.
- 19. Regarding claims 5-6, Jones, and Saulpaugh do not explicitly teach that the first computer process the input XML document to derive the execution instruction information for sending to the other peer computers and formats the execution instruction information as a second XML document for sending to the other peer computers.

Art Unit: 2195

20. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to include deriving the execution instruction information for sending to the other peer computers in XML format. One would be motivated by the desire to use a communication standard to perform the passing of platform independent messages.

21. Regarding claim 11-13, and 18-20, they are the method and computer system claims of claims 4-6. Therefore, they are rejected for the same reasons as claims 4-6.

Response to Arguments

- 22. Applicant's arguments filed 06/18/2008 have been fully considered but they are not persuasive.
- 23. Regarding claims 1 and 8, Applicant argues on pg 9 of Remarks:

"First, Jones fails to disclose or suggest forwarding, by a first computer in a group of peer computers execution instruction information to the other peer computers in the group, as required by each of claims 1 and 8. The Office Action (i.e., on pp. 2-3) purports to reproduce the limitations of claims 1 and 8, but omits the portion italicized above. Jones fails to satisfy the italicized portion, as Jones discloses (in a passage cited by the Office Action) a "coordinator" which forwards execution instructions to a group of servers and manages the processing performed thereby (p. 326). Jones says nothing about the coordinator being a peer computer in a group of which other peer computers

Application/Control Number: 10/720,893

Art Unit: 2195

form a part, and in fact suggests the opposite in disclosing that the coordinator oversees the processing performed by a number of servers."

Page 8

- 24. Examiner disagrees. First, while claim 1 recites a first computer in a group of peer computers, one of ordinary skill can interpret such a computer as having a management/coordinator function in light of the claim language. Claim 1 clearly indicates that it is the first computer that forwards instructions to the other computers. Furthermore, it is the first computer that receives and transmits communication messages in order to *synchronize and coordinate* the execution of the sequence of tasks (lines 15-18). Therefore, Applicant's arguments are unsupported by the claimed invention.
- 25. Secondly, Jones' invention is directed toward being applied on the Cm* system which consists of 50 computer modules each consisting of a processor and memory (pg 316, column 2, paragraph 2). Therefore, each of the computer modules have similar capabilities and could be interpreted as a group of peer computers.
- 26. Regarding claims 1 and 8, Applicant argues on pg 9 of Remarks:

"Jones simply fails to disclose or suggest anything at all relating to execution instruction information being forwarded by one of a group of peer computers to other computers in the group, as required by each of claims 1 and 8."

27. Examiner disagrees. As argued in claim 1, Jones teaches that the coordinator process sends work requests specifying image slices to each server process (pg 326)

Art Unit: 2195

column 2 paragraph 2). Therefore, it is clear that one computer forwards work to the other computers which reads upon claim 1 and 8.

28. Regarding claims 1 and 8, Applicant argues on pg 10 of Remarks:

"Further, Jones fails to disclose or suggest execution instructions which include an automatically, without user action, determined assignment of tasks to peer computers. On the contrary, Jones discloses that "human assistance is required" to determine the assignment of tasks to computers (p. 322, col. 2). Thus, not only does Jones not satisfy this limitation of claims 1 and 8, but Jones explicitly discloses a system which cannot satisfy it."

- 29. Examiner disagrees. While Jones does not teach automating the assignment of tasks, Jones does teach the assignment of tasks by a user as indicated by Applicant. As such the courts have held that broadly providing an automatic or mechanical means to replace a manual activity which accomplished the same result is not sufficient to distinguish over the prior art (MPEP 2144.04 III).
- 30. Regarding claim 15, Applicant argues on pg 10 of Remarks:

"It should be appreciated from the discussion above relating to claims 1 and 8 that Jones fails to disclose or suggest (1) an execution agent on each of a plurality of peer computers programmed for forwarding, to execution agents on the other peer computers, execution instruction information, (2) each peer computer in a group of peer computers being informed of tasks assigned thereto in relation to tasks assigned to the

Art Unit: 2195

other peer computers, or (3) execution instructions which include an automatically, without user action, determined assignment of tasks to the peer computers."

31. Examiner disagrees. Jones teaches the invention as argued above. Furthermore, an agent is defined as a program that performs a task for a user (Microsoft Computer Dictionary, 5th Edition, 2002). Since Jones teaches the use of Modules that are used for carrying out functions, such modules are analogous to the execution agents of claim 15.

Conclusion

32. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

33. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric C. Wai whose telephone number is 571-270-1012. The examiner can normally be reached on Mon-Thurs, 9am-5pm.

Art Unit: 2195

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng - Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/VAN H NGUYEN/ Primary Examiner, Art Unit 2194

/Eric C Wai/ Examiner, Art Unit 2195